

SK



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

E

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/577,313 05/24/00 BARANDA

P OT-4190A

┌

PM82/1221

└

EXAMINER

RANDY G HENLEY
OTIS ELEVATOR COMPANY
INTELLECTUAL PROPERTY DEPARTMENT
10 FARM SPRINGS
FARMINGTON CT 06032

TRAN, T	
ART UNIT	PAPER NUMBER

3652

DATE MAILED: 12/21/00

H

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/577,313

Applicant(s)
Baranda et al.

Examiner
Thuy V. Tran

Group Art Unit
3652



☒ Responsive to communication(s) filed on Nov 7, 2000 & telephone interview on Nov. 9, 2000.

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 23-43 is/are pending in the application.

Of the above, claim(s) 25-27, 40, 42, and 43 is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 23, 24, 28-39, and 41 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 3652

DETAILED ACTION

Election/Restriction

1. Applicant's election without traverse of Species I and V in Paper No. 3 and telephone interview on November 9, 2000, respectively, is acknowledged.
2. Claims 25-27, 40, 42 and 43 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 3 and telephone interview on November 9, 2000.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 23, 24, 28-39 and 41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re claim 23, it is unclear what part of the claim is the preamble and where the body of the claim starts. It appears that claim 23 contains only the preamble. A proper claim must contain the preamble and a body.

Art Unit: 3652

5. Claim 39 recites the limitation "the load carrying ropes" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 23, 24, 28-30, and 34-36 (as best understood) are rejected under 35 U.S.C. 102(b) as being anticipated by GB 2,162,283 A.

GB '283 discloses a traction drive for an elevator system comprising a traction sheave including a plurality of traction surfaces and dividers, a plurality of tension members each having an aspect ratio (w/t) of greater than two. The tension member comprises a plurality of individual load carrying ropes formed from a non-metallic material (page 1, lines 60-63) and encased within a common layer of elastomer coating which defines an engagement surface for engaging the sheave.

8. Claims 23, 24, 28-30, and 34-36 (as best understood) are rejected under 35 U.S.C. 102(b) as being anticipated by GB 2,134,209 A.

GB '209 discloses a traction drive for an elevator system comprising a traction sheave 24, Figure 11, including a plurality of traction surfaces and dividers, a plurality of tension members

Art Unit: 3652

each having an aspect ratio (w/t) of greater than two. The tension member comprises a plurality of individual load carrying ropes formed from a non-metallic material (page 1, lines 60-63) and encased within a common layer of elastomer coating which defines an engagement surface for engaging the sheave.

9. Claims 23, 28, 29, 33 and 41 (as best understood) are rejected under 35 U.S.C. 102(b) as being anticipated by Pearson 1,164,115.

Pearson '115 discloses a traction drive for an elevator system comprising a traction sheave 10 having a traction surface 14 formed from a non-metallic material that is bonded to the drive sheave, and a pair of retaining rims 13 on opposite sides, a plurality of flat tension members 21, 22.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 32 and 33 (as best understood) are rejected under 35 U.S.C. 103(a) as being unpatentable over either GB 2,162,283 A, GB 2,134,209 A or Pearson 1,164,115 in view of Patterson, Jr., 2,326,670.

Art Unit: 3652

Each of the GB '283, GB '209 or Pearson '115 separately discloses all the claimed limitations except for a roller disposed proximate to the traction sheave and engage in rolling contact with the tension member.

Patterson, Jr. '670 discloses a traction system having a roller 12 disposed proximate to the traction sheave 13 and engaged in rolling contact with the tension member 10. It would have been obvious to one having ordinary skill in the art to utilize the guidance roll for the traction drive system of GB '283, GB '209 or Pearson 115 as disclosed by Patterson, Jr. in order to prevent the tension member from slipping over the traction sheave.

12. Claims 32 and 33 (as best understood) are rejected under 35 U.S.C. 103(a) as being unpatentable over either GB 2,162,283 A, GB 2,134,209 A or Pearson 1,164,115 in view of Sapozhnikov et al. 3,910,559.

Each of the GB '283, GB '209 or Pearson '115 separately discloses all the claimed limitations except for a roller disposed proximate to the traction sheave and engage in rolling contact with the tension member.

Sapozhnikov et al. '559 discloses a hoisting apparatus having roller 7 disposed proximate to the sheave and engaged in rolling contact with the tension member for preventing the rope from slipping over the sheave. It would have been obvious to one having ordinary skill in the art to utilize the guidance roll for the traction drive system of GB '283, GB '209 or Pearson 115 as disclosed by Sapozhnikov et al. '559 in order to prevent the tension member from slipping out off the traction sheave.

Art Unit: 3652

13. Claims 37 and 38 (as best understood) are rejected under 35 U.S.C. 103(a) as being unpatentable over Pearson 1,164,115 in view of Bruns 3,279,762.

Pearson '115 discloses that the traction surface 14 may be covered with leather or other yieldable material (page 1, lines 40-43). Pearson discloses all the claimed limitations except for the traction surface is formed from polyurethane.

Bruns '762 discloses that using a polyurethane material as a traction surface would provides great traction and causes far less abrasive wear on the rope. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized polyurethane as a traction surface for the traction sheave of Pearson as taught by Bruns in order to provide better traction for the drive system and better life cycle for the tension member.

14. Claim 39 (as best understood) is rejected under 35 U.S.C. 103(a) as being unpatentable over either GB 2,162,283 A, GB 2,134,209 A or Pearson 1,164,115.

Each of the above mentioned references separately discloses all the claimed limitations except for an equation for calculating the maximum rope pressure.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design an elevator system not exceeding the maximum rope pressure, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

Art Unit: 3652

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Each of the cited references separately discloses a traction drive for an elevator system, a traction sheave surface and/or a retainer device for retaining a tension member.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy v. Tran whose telephone number is (703) 308-2558.

 12/18/00

ROBERT P. OLSZEWSKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

TVT (TVT)

December 17, 2000